Image processing

Tuesday, 21. September 2021 12:35

1) Euclidean

$$D(A, P_2) = \sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2}$$

$P_1(2,0)$ x_1 y_1

$$D = \sqrt{(-1)^2 + (-2)^2}$$

$$\sqrt{1+4} = \sqrt{5} = 2.2 \text{ Pixel}$$

	0	1	2	3
0	6	7	2	1
1	9	4	8	5
2	3	1	0	9
3	10	11	15	12
4	0	12	3	4

$P_2(3,2)$ x_2 y_2 5X4

2) City-Block

$$|2-3| + |0-2|$$

$$1 + 2 = 3 \text{ Pixels}$$

3) Chess Board

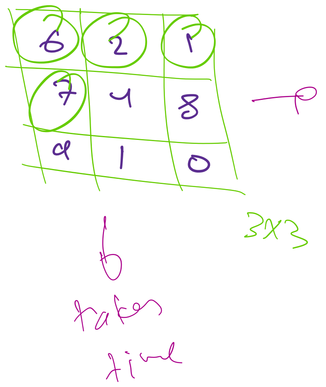
$$\max(|2-3|, |0-2|)$$

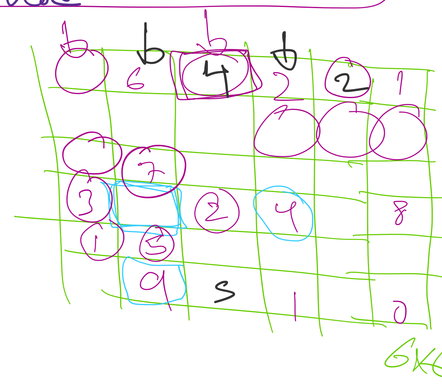
$$\max(1, 2) = 2 \text{ Pixel.}$$

Ex: Consider the following two points in an image $P_1(6,3)$ $P_2(4,7)$

Find the distance between the above two points, using:

1. City Block method
2. Chess Board method.
3. Euclidean method





take first

1000 × 7000

2000 × 1500

4 → A+

3 → A

3 → B+

2 → B

توزيع الدرجات

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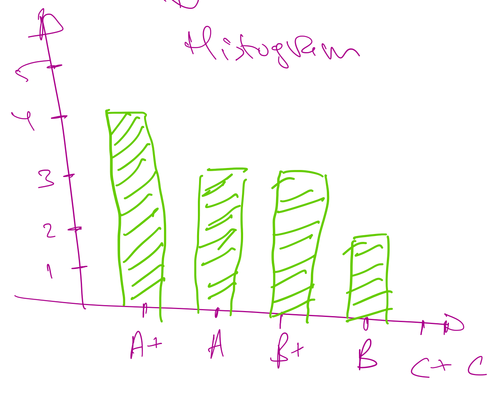

Green

RGB

Blue

Red